Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

authors apparently feel it desirable to teach as many facts as possible through demonstration or experiment. This probably accounts for the large number of experiments used for the year's course, and for their qualitative and in many cases extremely elementary character. The experiments stand quite in contrast with the aims set forth by GANONG in his manual for a college course in this subject. "The emphasis is thrown, for advanced or college work, not upon qualitative results obtained by students from apparatus of their own making, but upon quantitative results obtained from practically accurate or normal apparatus manufactured expressly for its particular use." The lack of reliability in much of the data of plant physiology is due to the loose qualitative methods used in the subject. I know no better place to begin the development of reliable quantitative technique than in college and university courses. GANONG has repeatedly urged this necessity. Time-honored experiments that have taught misconceptions ought to be dropped from manuals or modified so as to teach the truth. As an illustration, we may mention the use of the potassium bichromate and ammoniacal copper sulphate screens for the purpose of determining the relative photosynthetic value of red and blue light. KNIEP and MINDER[5] have shown that the results obtained in this case are due to different intensities and not to different qualities of the light. This experiment is of significance only when the screens are so arranged as to give equal energy values. Under this condition KNIEP and MINDER found equal photosynthetic activity for the two ends. When exact chemical methods give more trustworthy results (as is the case in experiment 35 on the retention of salts by soil), one can hardly see why they should be avoided in a university course.—WILLIAM CROCKER.

Outlines of geologic history.—Under this title a series of essays involving a discussion of geologic correlation is published.[6] The essays were presented before Section E at the Baltimore meeting (1908) of the American Association, and include three of interest to botanists: "The upper paleozoic floras, their succession and range," by DAVID WHITE; "Succession and range of mesozoic and tertiary floras," by F. H. KNOWLTON; "Origination of self-generating matter and the influence of aridity upon its evolutionary development," by D. T. MACDOUGAL. The first two papers cited present in convenient outline form the succession of floras from the middle Devonian to the end of the Tertiary. Naturally the presentation is chiefly stratigraphic, with suggestions as to climatic changes; but the material for a consideration of the historical basis for phylogenetic conclusions is thus made more available. MACDOUGAL'S essay, as the title suggests, is highly speculative, but the basis of facts which underlies the discussion has been developed by his physiological investigations, chiefly in connection with the vegetation of arid areas.—J. M. C.

---

[5] BOT. GAZETTE **49**:390. 1910.

[6] Outlines of geologic history with especial reference to North America. Symposium organized by BAILEY WILLIS. Compilation edited by ROLLIN D. SALISBURY. Chicago: The University of Chicago Press. 1910. $1.50.

Scientific expedition to New Guinea.—A second part of volume VIII, continuing the account of the botanical results of this expedition, has been published recently,[7] which includes about 50 families of the higher plants, over 190 genera, and approximately 300 species and varieties. The taxonomic work has been done by noted specialists, and their results have been ably edited by Dr. H. A. Lorentz. Nearly one-third of the species and varieties enumerated are new to science, and the following genera are published here for the first time: *Salacicratea* of the Hippocrateaceae, *Diandriella* of the Araceae, and *Cyrtandropsis* of the Gesneriaceae. The more important constituents of the flora, as shown by families, are: the Euphorbiaceae (60 species), Leguminosae (52), Piperaceae (21), Araceae (20), Myrtaceae (19), and Compositae (17). The publication is a scientifically important contribution to our knowledge of the flora of New Guinea.—J. M. Greenman.

NOTES FOR STUDENTS

Current taxonomic literature.—O. Ames (Torreya **10**:90, 91. 1910) records a new species of *Ponthieva* (*P. Brittonae*) from the Bahamas.—J. C. Arthur (Mycologia **2**:213–240. 1910) under the title "Cultures of Uredineae in 1909" has placed on record some of the results of his researches during the past year, and includes two new species of *Gymnosporangium* described by F. D. Kern.—W. Becker (Beih. Bot. Centralbl. **26**:289–390. 1910) has issued the second and closing article on the taxonomy of European violets, embodying the results of long-continued study in this genus.—M. Bouly de Lesdain (Bull. Soc. Bot. Fr. IV. **10**:236–240. 1910) under the title "Notes lichénologiques no. XII" has described several new species of lichens, some of which are from Mexico.—T. S. Brandegee (Univ. Calif. Pub. Bot. **4**:85–95. 1910) has published 23 new species of flowering plants from Mexico; the paper is based chiefly on collections made in the state of Puebla by C. A. Purpus, and the types are deposited in the herbarium of the University of California. One new genus (*Amphorella*) of the Asclepiadaceae is proposed.—N. L. Britton (Bull. Torr. Bot. Club **37**:345–363. 1910) in continuation of his studies on West Indian plants presents a synoptical treatment of the genus *Comocladia*, recognizing 18 species of which 7 are indicated as new to science; the article includes also descriptions of 24 new species of spermatophytes belonging to different genera.—G. Dismier (Bull. Soc. Bot. Fr. IV. **10**:Mém. 17, pp. 1–37. 1910) under the title "Revision des Philonotis de l'Amérique" recognizes 25 species, 2 of which and several varieties are new.—P. Dusén

---

[7] Nova Guinea. Résultats de l'expédition scientifique Néerlandaise à la Nouvelle-Guinée en 1907 sous les auspices du Dr. H. A. Lorentz. Vol. VIII, Botanique Livraison II. 4to, pp. 221–426. *pls. 52–68.* Leide: E. J. Brill. 1910.